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United States Patent [19]

Van Leth et al.

[11] Patent Number: **5,714,051**[45] Date of Patent: **Feb. 3, 1998**[54] **METHOD FOR DEPOSITING CATHODE MATERIAL ON A WIRE CATHODE**

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[57] **ABSTRACT**

A method and apparatus for depositing emitter material (3) on a wire cathode by means of electrodeposition. An amount (13) of a suspension comprising an alkaline-earth compound is transferred by a drop holder (11) which is positioned around the wire (2), by movement in a direction transverse to a longitudinal axis of the wire (2), whereafter an electric voltage is applied to the drop holder (11) and the wire (2) to deposit the emitter material (3) on the wire (2), after which the drop holder (11) is withdrawn from the wire (2) again. During the electrodeposition process the drop holder (11) and the wire (2) can be moved with respect to each other along sections of the wire (2) where the emitter material (3) has to be deposited.

10 Claims, 3 Drawing Sheets